



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

SEP 23 2013

REPLY TO THE ATTENTION OF:

E-19J

Superintendent
United States Department of the Interior
National Park Service
Cuyahoga Valley National Park
Brecksville, Ohio 44141

Re: Draft White-tailed Deer Management Plan (Plan)/Draft Environmental Impact Statement (EIS), Cuyahoga Valley National Park, Ohio - CEQ No. 20130220

Dear Superintendent:

The U.S. Environmental Protection Agency (U.S. EPA) has reviewed the Draft EIS and Plan for proposed white-tailed deer management in the Cuyahoga Valley National Park (National Park). Our review and comments are pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), and Section 309 of the Clean Air Act.

The Plan/Draft EIS identifies several adverse effects on ecosystem diversity from a large deer population and indicates a management plan for white-tailed deer is needed. After being nearly extirpated in the late 1800s and early 1900s, the Ohio deer population recovery is reflected in dramatically increasing deer numbers in the state since the mid- to late 1900s to a statewide deer population estimate of 750,000 in October 2011. Studies show that excessive deer browsing reduces forest regeneration, resulting in adverse changes to forest structure and composition and to wildlife habitat. Long-term ecological monitoring and exclosure studies at the National Park have found that deer browsing is severely impeding the growth of seedlings, limiting the height of tree seedlings, and suppressing the growth of native groundcover. Soils are affected primarily by erosion resulting from loss of vegetative ground cover due to excessive deer browsing. Deer browsing was also found to be related to a lower abundance of forest songbirds, particularly ground and intermediate canopy nesters. Disturbance to vegetation from excessive deer browsing could also create opportunities for non-native invasive plant species to become established or spread across more acres of the National Park. Residential areas, resource conservation areas, and local farms also experience pressures from deer browsing. A large deer population also increases the risk of deer-vehicle accidents on roadways in and around the National Park.

Because the deer population has grown and continues to exist at relatively high densities that can have adverse effects on the vegetation within the National Park, the National Park Service (NPS) has determined that action is needed to provide the National Park with a long-term plan to address deer management and ensure:

- Deer do not become the dominant force in the ecosystem adversely impacting forest regeneration, sensitive vegetation, and other wildlife;

- Natural distribution, abundance, and diversity of plant and animal species are not adversely affected by the large number of deer in the National Park;
- Declining forest regeneration is addressed, and deer browsing does not continue at levels that
- eliminate or substantially reduce forest regeneration or cause adverse effects to wildlife habitat and forest structure and composition; and
- Deer management actions are coordinated with other jurisdictional entities and other stakeholders.

The Draft EIS and Plan analyze a no-action alternative (Alternative A) as well as three action alternatives. The action alternatives differ by the type of activities the National Park would pursue to reduce the deer population:

- Alternative A, the no action alternative, would continue existing management - deer and vegetation monitoring, data management, activities to protect restoration plantings, research, and enforcement of the existing wildlife feeding plan. No new actions would occur to reduce the effects of deer over-browsing.
- Alternative B would include the actions currently undertaken as part of Alternative A and incorporate non-lethal actions to reduce deer population numbers. Non-lethal actions include construction of large-scale deer exclosures for the purposes of forest regeneration and non-surgical reproduction control for does when this technology meets certain criteria.
- Alternative C would include all actions described under Alternative A as well as a direct reduction of deer through sharpshooting and capture/euthanasia, where appropriate.
- Alternative D would include all actions described under Alternative A with a combination of lethal and non-lethal actions taken from Alternatives B and C - sharpshooting, capture/euthanasia to reduce the deer population and phasing in of non-surgical reproductive control of does for longer-term maintenance of lower deer population numbers, when this technology meets certain criteria.

The impact analysis for all alternatives is based on the principles of adaptive management, allowing the NPS to change management actions when information emerges from monitoring results and ongoing research throughout the life of the proposed 15-year plan.

The Draft EIS/Plan indicates the NPS' preferred alternative to manage the deer population is Alternative D. The rationale included in the Draft EIS/Plan for selecting Alternative D indicates:

- Alternative A would result in long-term moderate to major adverse impacts because browsing pressure would be expected to remain high throughout the 15-year life of the management plan.
- Because reproductive control would result in only a gradual reduction in the deer population, results under Alternative B would be similar to those expected under Alternative A. Even though population goals could be met over the longer term under Alternative B, the risk of not meeting the goal would be high because exclosures would protect only a small portion of the National Park vegetation at any one time, requiring 10 years for re-growth above browse line. Alternative B would result in long-term moderate to major adverse impacts, with short-term negligible impacts from deer management (e.g., placement of bait piles and trampling).
- According to the Draft EIS/Plan, Alternative D was selected as the environmentally preferable alternative because it would best protect the biological and physical environment by ensuring an immediate reduction in deer population numbers that could be sustained with proven methods over the life of the plan. Alternative D would also best protect, preserve, and enhance the cultural and natural processes that support the National Park's forests and cultural landscapes by providing multiple management options to maintain low deer

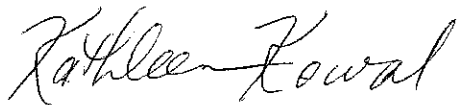
numbers. Although Alternatives C and D are very close in meeting the stated purpose and need, Alternative D was selected primarily because it provides the National Park with the ability to select the least environmentally damaging option as science and technology advance. Alternatives A and B were not selected because of their lack of effect on deer population numbers, which would result in potential or continued adverse impacts on the biological and cultural resources of the National Park during the 15-year life of the plan.

Based on the analyses contained in the Plan/Draft EIS, including implementation costs, we believe the preferred alternative best addresses the purpose and need as stated within the document. Therefore, we rate this project as *Lack of Objections (LO)*. A summary of the rating system used in the evaluation of these documents is enclosed for your reference. We do, however, have one recommendation to enhance proposed management activities: the addition of signage in various locations of high visitor use, particularly in areas where wildlife feeding frequently occurs. Signs exhibiting photographs of damage at deer browse line, the floral and faunal species adversely effected by over browsing and loss of ground cover, and anticipated results of deer management (e.g., regeneration of woody and herbaceous species) might increase understanding of the National Park's proposed actions. We recommend this opportunity to increase visitor understanding and reduce wildlife feeding be addressed in the Final EIS/Plan.

We commend the development of scientifically-defensible vegetation and wildlife impact levels and corresponding deer population numbers that would serve as thresholds for taking adaptive management actions as part of the proposed management plan. Additionally, because the legislative boundary of the National Park contains many different landowners, deer management activities must take into consideration deer management actions of adjacent owners to enhance deer management success within the National Park. Due to this intricate mix of land uses and landownership within the National Park, as well as management activities that are being undertaken, we commend the National Park's commitment to coordinate with appropriate local and private entities.

Thank you for the opportunity to review and comment on proposed management actions in the National Park. If you have any questions regarding the contents of this letter, please contact Kathleen Kowal of my staff at (312) 353-5206 or via email at kowal.kathleen@epa.gov.

Sincerely,



for Kenneth A. Westlake, Chief
NEPA Implementation Section
Office of Enforcement and Compliance Assurance

Enclosure: Summary of Ratings Definitions

